

INEQUALITIES IN TRANSITION TO HOMEOWNERSHIP IN HOUSEHOLD LIFE CYCLE

Anna Matel^{1*}

¹*Department of Economic and Social Development, University of Białystok, ul. Warszawska 63, 15-062 Białystok, Poland, E-mail: a.matel@uwb.edu.pl, ORCID 0000-0002-4239-914X*

* Corresponding author

ARTICLE INFO	ABSTRACT
Keywords: tenure status, housing market, ownership, tenants, life cycle JEL Classification: D01, R21	The housing situation changes with the household formation cycle. Age, marital status and having children are key to explaining the tenure status of households. However, the question of what factors differentiate owners and tenants if they are at the same stage of household formation arises. Using the logit model method, the determinants of tenure status of Polish households in the same life cycle stages were compared. The study used EU-SILC data for 2018. It showed that both the determinants of housing choices and the strength of their impact differ. At the household formation stage, income and the size of the city are important determinants. At this stage, housing choice is limited due to the availability of the rental market and the need for young people, who migrate to larger cities, to become independent. At the stabilization stage, the source of inequality was the gender of the household head, education, health and marital status. It has been observed that entering into an informal relationship by divorced persons does not equalize their chances of homeownership.
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1. Introduction

The basic forms of satisfying housing needs are ownership and renting. Poland is a country with a very high share of owner-occupied housing (Eurostat 2022), with simultaneously low - and continuously declining - affordability of housing (see: Czerniak et al., 2022, Strączkowski, 2022). The percentage of Poles living in owner-occupied housing in 2021 was 86.8% (EU-SILC), one of the highest among European Union countries (with the EU-27 average at 69.9%). Such a high rate is characteristic of many post-transformation countries, such as the Czech Republic (78.3%), Romania (95.3%), Hungary (91.7%), and Lithuania (89%). This is due to the fact that, during the transition period, cooperative and semi-state-owned housing stock was privatized, in many cases for symbolic payment (Matel & Olszewski, 2022). Therefore, the high share of landlords should be seen as a cause, rather than an effect, of Poles' strong attachment to ownership and a strong preference for owning an apartment outright (see Rubaszek & Czerniak, 2017; Bryx et al. 2021; Rubaszek & Rubaszek, 2021). Moreover, the poorly functioning rental housing market means that Poles basically have no good

alternative to ownership of apartments. As a result, renting is treated as a temporary form of accommodation (see Rubaszek & Rubaszek, 2021), which translates into both worse housing conditions for tenants in Poland and higher expense related to housing maintenance (Olszewski & Matel, 2022). In view of the above, there is a strong relationship between age and entry into ownership in Poland (Augustyniak et al., 2013; Matel & Olszewski, 2022; Głuszak 2015). Renting is becoming an attractive form of meeting housing needs for people with unstable living situations who want to remain mobile. Later in life, there is a strong desire to purchase a home. Here, in turn, the financial situation becomes an obstacle. The relationship between renting and ownership is usually studied in society by analyzing the housing situations of individuals (Matel & Olszewski, 2022; among others) or households (Głuszak, 2015; Matel, 2021; among others). In view of the strong connection between these choices and age, marital status and having children - which in essence determine the life cycle of a household - it is interesting to study the phenomenon in the context of its phases. The purpose of this article is to show how the sources of inequality

in access to housing ownership change over the life cycle of households. For this purpose, in the study, households were divided into those in the phase of: development, stabilization and reduction. Then, the factors determining their ownership status were compared.

The structure of the article is as follows. The first section is an introduction presenting the general idea of the study and indicating its importance. The next section focuses on previous research analyzing the determinants of the tenure choices of households. Subsequently, data and methods are discussed. In the next section, the logit models of tenure choices at three stages of a households' life cycle are presented, and the sources of inequalities in access to homeownership explained. The data from the EU Survey on Income and Living Conditions (EU-SILC) was used.

2. Material and methods

Much attention has been devoted to the analysis of housing choices in international literature. Most often, they come down to examining the factors determining ownership and rental (e.g. Bayrakdar et al., 2019; Maroto & Severson, 2020; Fiori et al., 2020; Mundra & Uwaifo Oyelere, 2019). Such analyses were also conducted in relation to Poland. (Augustyniak et al., 2013; Głuszak 2015; Matel 2021; Matel & Olszewski 2022). Some of the analyses focus on specific age groups. Much attention in the literature has been devoted to the housing choices of young people, often referred to as nest leavers (Her et al., 2022; Coulter, 2017; Fuster et al., 2019; Lennartz et al., 2016). Such studies have also been conducted in relation to young adults in Poland (Matel, 2022).

Housing choices seem to be the result of three groups of factors. These are: financial possibilities, household preferences and characteristics of the real estate market. Housing choices are made in specific market conditions, which translates into their differences in different regions of the country or between countries, as well as in subsequent age cohorts.

The financial capacity of a household influences the possibility of buying a flat. These include both current income, accumulated assets, creditworthiness, which is related to the stability of employment, and financial transfers, mainly received from parents. Higher income is conducive to entering into ownership (Blaauber, 2010; Kim & Jeon, 2012; Mundra & Uwaifo Oyelere, 2019; Bayrakdar et al., 2019). Also,

the level of wealth positively affects the probability of homeownership (Kim & Jeon, 2012; Mundra & Uwaifo Oyelere, 2019; Arrondel et al., 2010). On the one hand, higher assets are conducive to entering into ownership, whereas on the other hand, real estate is an element of assets. With similar mortgage and rental costs, choosing to rent may lead to an asset gap. An important factor is also creditworthiness, which is related to both, the current income, accumulated assets and professional situation. Usually, housing ownership is favored by having a permanent work contract, being continuously employed and working in high-skilled occupations (Lersh & Dewilde, 2015). The possibility of obtaining parental support is also important, especially at the first stages of forming households (Lux et al., 2021; Lee et al., 2020).

The second group of factors determining the living arrangement of a household are preferences. Taking up ownership is associated with a significant reduction in spatial mobility (Fiori et al., 2020; Thomas & Mulder, 2016; Bayrakdar et al., 2019). As a result, people with an unstable professional or partner situation are less likely to buy flats. As a result, married people usually show a greater preference for ownership than singles (Blaauboer, 2010; Cheung et al., 2020; Lauster & Fransson, 2006). Preferences may also be influenced by the fact that the rental market offer is not adjusted to the needs of tenants, which limits the actual choices of a household. This could force people to buy their own house even when they actually prefer to rent it.

Both financial opportunities and preferences typically change over the life cycle of a household. This, in turn, is analyzed differently in the literature. A frequent criterion for specifying phases within it is the age of the head of the household (e.g. Gyournio & Linneman, 1997; Barrios et al., 2013). Age is an important variable affecting the housing situation. With age, the share of married people with children and a stable professional situation increases, which is conducive to preferring ownership. On the other hand, income and accumulated assets usually increase with age, which favors the financial possibilities of purchasing a flat. As a result, the percentage of ownership usually increases with age, although there is a decrease in the likelihood of homeownership in older age groups in many economies, which may result from lower housing needs, high maintenance costs, and the desire to live closer to children (Disney et al., 1995; Blaauber, 2010; Kim & Jeon, 2012). In Poland, this trend is not visible, which can be attributed to the fact that seniors declare their

preferences to stay in their homes as long as possible (Strączkowski & Boruta, 2018).

The analysis of the life stages of a household based only on the age criterion raises problems for the comparability of research. In subsequent periods, the "age limits" of various life events shift. This can be observed on the example of Poland, where the age of

marriage is increasing year by year (Figure 1), as is the age at which women have their first child (Figure 2). Therefore, it seems that such a classification should be supplemented with key moments in the life of a household, such as: getting married, giving birth to the first child, divorce or the death of a spouse.

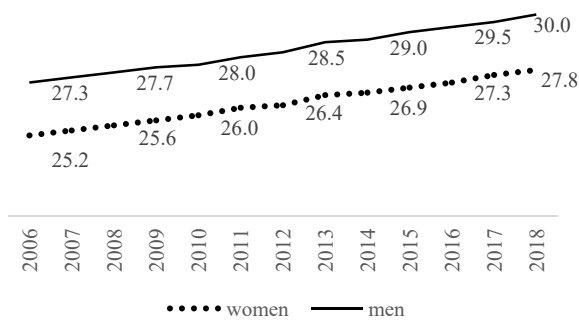


Fig. 1. Median age at marriage, Poland. *Source:* Roczniki Demograficzne Polski [Demographic Yearbooks of Poland] 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 2016, 2017, 2018, 2019, Central Statistical Office.

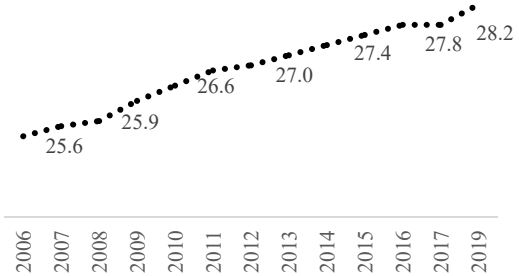


Fig. 2. Median age of mother at first birth, Poland. *Source:* Roczniki Demograficzne Polski [Demographic Yearbooks of Poland] 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 2016, 2017, 2018, 2019, Central Statistical Office.

3. Background - housing and households' life cycle in Poland

In the conducted study - in order to compare how the housing choices of Poles changed in subsequent phases of the life cycle - three phases of the household life cycle were specified, taking into account the following variables: age, marital status and having children (Matel, 2021). The household life cycle is divided into three phases:

1. Formation stage – the head of the household is under the age of 35, he/she is not married and has no children;
2. Stabilization stage - a head of the household is:
 - a. between 36 and 64 years except for divorced/ separated / widowed people (unless the partner lives in the household - the person started a new relationship)
 - b. up to 36 years of age if he has children or is married,
3. Reduction stage – the head of the household is:
 - a. over 65 years of age,
 - b. divorced / separated / widower and has not remarried (regardless of age).

Table 1 presents the structure of households in Poland according to this division in 2006, 2010, 2014 and 2018.

Table 1

Household structure in Poland by the household life-cycle (%)				
Group	2006	2010	2014	2018
Formation stage	3.0	2.8	2.7	3.6
Stabilization stage	61.1	60.6	57.5	52.0
Reduction stage	35.9	36.7	39.8	44.4

Source: Matel, 2021.

In the analyzed period, a later age of marriage and having children at a later age (Chart 1, 2) translated into a growing share of households in the formation phase. Population aging (Roszkowska, 2020), combined with a growing percentage of divorced people (Baranowski & Sztandynger, 2019), translated into a growing share of households in the reduction phase, which has an impact on the decrease in the percentage of households in the stabilization phase.

As can be expected, a different tenure status structure is observed at different stages of the life cycle (Table 2).

Table 2

Share of tenants by stage of the household life cycle in Poland in 2006-2018				
Group	2006	2010	2014	2018
Formation stage	46.8	43.9	49.3	57.0
Stabilization stage	25.3	17.1	15.6	16.4
Reduction stage	25.7	20.5	17.3	17.2

Source: Matel, 2021.

Research by Matel (2021) showed that the share of ownership is lowest at the formation stage, which means a high share of renters. In 2006, less than half of the people in this phase lived in a rented

apartment, but by 2018, this indicator had increased to 57%. The percentage of tenants drops significantly at the stage of household stabilization. What's more, it is getting lower in subsequent cohorts. This shows that the increase in ownership recorded in Poland in the last decade does not equally apply to all phases of household development. There is an increasing disproportion in the housing choices of people at the stage of family formation and its stabilization. Young, unmarried people without children are increasingly choosing to rent, while married couples, including those with children, are increasingly choosing to own.

The group of young people is specific in terms of housing choices. Often, a third living arrangement is available to them, which is staying at their parents' homes. The survey conducted at the household level includes only those people who became independent (created separate households). In recent years, significant changes have been observed in Poland in the field of young adults becoming independent (Matel, 2022). More and more young people decide to move out from their parents'. The rate of people aged 25-25 co-residing with parents fell from 73.7 to 52% in 2006-2018. Young people move to both rented and owned properties, with the dynamics of changes in rents being higher than the dynamics of changes in ownership, which is reflected in the changes presented in Table 2.

4. Results

4.1. Data and method

Microdata for 2018 from the EU-SILC survey was used. The sample was limited to households that had undergone relocation in the last 10 years. The aim was to focus on housing choices in current periods, rather than historical changes. As a method, logistic regressions were used (a.o. Fiori et al., 2020; Blaauber, 2010; Bayrakdar et al., 2019; Thomas & Mulder, 2016; Mundra & Uwaifo Oyelere, 2019). When more housing choices than ownership and renting are compared, a multinomial logistic regression is used (e.a. Maroto & Severson, 2020).

The model of logistic regression can be expressed as follows (Agresti, 2013):

$$\pi_i = \frac{\exp(\alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_p X_{pi})}{1 + \exp(\alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_p X_{pi})} \quad (1)$$

where π_i is the probability of owning for household i and X_i ($X_{1i}, X_{2i}, \dots, X_{pi}$) is the vector of covariates the level of households.

SPSS software was used to estimate the models. The diagnostics of the models was carried out on the

basis of: a collective test of the coefficients of the χ^2 , R^2 Nagelkerke model, the Hosmer Lemeshow test and an analysis of the percentage of correct classifications of observations.

Nine explanatory variables were used in the study. To analyze housing choices, variables that can be divided into three groups are used: socio-demographic (related to the individual and the household), economic and real estate market-related. The availability of data is determined by the type of social survey the researcher uses. This is because most studies are based on the results of nationally representative surveys rather than dedicated survey research (where the author has complete freedom in the selection of variables). In terms of socio-demographic variables, the following were selected: marital status, age, gender and having children. Other socio-demographic variables that are used in the literature are: ethnic/racial group, citizenship status (e.g. Mundra & Uwaifo Oyelere, 2019) or being foreign (Bayrakdar et al., 2018), which was not found to be significant in the case of Poland. Among the economic factors, working status, income per person in the household and having a tertiary education were analyzed. This is a typical set of economic variables used in this type of studies. Other economic variables that could be used are: having a dual income as a household (Fiori et al., 2020; Thomas & Mulder, 2016) or the number of self-employed workers in a household. These variables were not included due to the problem of multicollinearity. Many studies include family background variables (Clark & Mulder, 2000; Bayrakdar et al., 2019). This is particularly important in the study of young people (Maroto & Severson, 2020; Fiori et al., 2020). Unfortunately, such a variable was not included in the EU-SILC 2018 survey. This may significantly reduce the possibility of predicting the housing situation of those in the family formation stage. The variable of the level of urbanization was also used to indicate differences between people living in rural and urban areas. The variable of region was not used (as e.g. Maroto & Severson, 2020), as the EU-SILC database does not include the identifiers of the voivodeships. Some of the variables were used to create a division of households into phases of the life cycle. As a result, the decision was made to build three separate logit models, thus abandoning one model with interactions. As a result, the impact of marital status and having children was not analyzed in phase 1 (this group includes only childless and never married persons).

4.2. Research results

According to the obtained results, the highest indices of model parameter estimation were obtained in the case of the household stabilization phase (76.9% of correct predictions, pseudo- $R^2=0.429$). Using the analyzed features, the housing choices of people in

the household formation phase was characterized by the lowest predictive power (69.9% of correct predictions, pseudo- $R^2=0.244$). This was due to the smallest size of this research sample and a smaller number of explanatory variables used. The results are presented in Table 4. Forest plots were presented for selected variables (Figure 3).

Table 3

Explanatory variables - coding		
Variable	Definition	in:
Marital status	Marital status of a head of a household 1 – married (base) 2 – never married 3 – divorced / separated / widowed	1-3
Gender	1 if the head of the household is female	0-1
Age	age of the head of the household	Years
Child/Children	1 if there is at least one child in the household	0-1
Tertiary education	1 if the head of the household has any kind of tertiary education	0-1
Working/Retire	1 if the head of the household is currently working or retired	0-1
Income per person	total disposable income of the household per one member of the household	thou € per year
Degree of urbanization	1 - densely-populated area - areas with population density of no less than 1500 people per km ² , and town population of no less than 50,000 (base) 2 - intermediate area - areas with a population density of no less than 30 people per square kilometer, and town population of no less than 5,000. 3- thinly-populated area - all other areas	Ordinal
Health	1 – if the head of the household assesses his/her state of health as bad	0-1

Source: own elaboration: Methodological guidelines and description of EU-SILC target variables, European Commission, Eurostat 2018.

Table 4

Logit models results predicting homeownership among Polish households in household formation stages, 2018 (coef.)									
Variable:	Formation stage			Stabilization stage			Reduction stage		
	OR	St.Err.	P value	OR	St.Err.	P value	OR	St.Err.	P value
Marital status									
Married (base)									
Never married				0.344***	0.125	<0.001	0.687	0.464	0.419
Divorced/separated/widowed	-	-	-	0.392***	0.201	<0.001	0.489***	0.191	<0.001
Female	0.738	0.200	0.170	0.626***	0.103	<0.001	1.541*	0.174	0.013
Age	1.028***	.013	<0.001	1.022***	0.003	<0.001	1.011***	0.003	<0.001
Child/children	-	-	-	0.850	0.107	0.850	0.583*	0.232	0.020
Being in bad health	2.345	1.014	0.400	0.531**	0.214	0.003	0.738	0.168	0.071
Tertiary education	1.554	0.257	0.087	2.522***	0.125	<0.001	2.865***	0.225	<0.001
Working/Retire	1.365	0.335	0.352	0.965	0.126	0.780	0.900	0.207	0.612
Income per person	1.135***	0.029	<0.001	1.061**	0.019	0.002	1.099**	0.031	0.003
Urbanisation level:									
Densely-populated area (ref.)									
Intermediate area	2.878**	0.351	0.003	1.199	0.123	0.139	0.787	0.168	0.154
Thinly-populated area	7.296***	0.398	<0.001	1.950***	0.118	<0.001	1.013	0.170	0.938
N		405			2540			1127	
% not taken into account		7.5			5.3			3.1	
Chi-2 test, p-value		<0.0001			<0.001			<0.001	
pseudo- R^2		0.244			0.429			0.319	
Hosmer & Lemeshow Test, p-value		0.432			0.398			0.302	
% correct predictions		69.9			76.9			72.2	

Notes: *p<0.05, **p<0.01, ***<0.001, estimates weighted using respondents' weight from the survey.

Source: EU-SILC Poland, 2018.

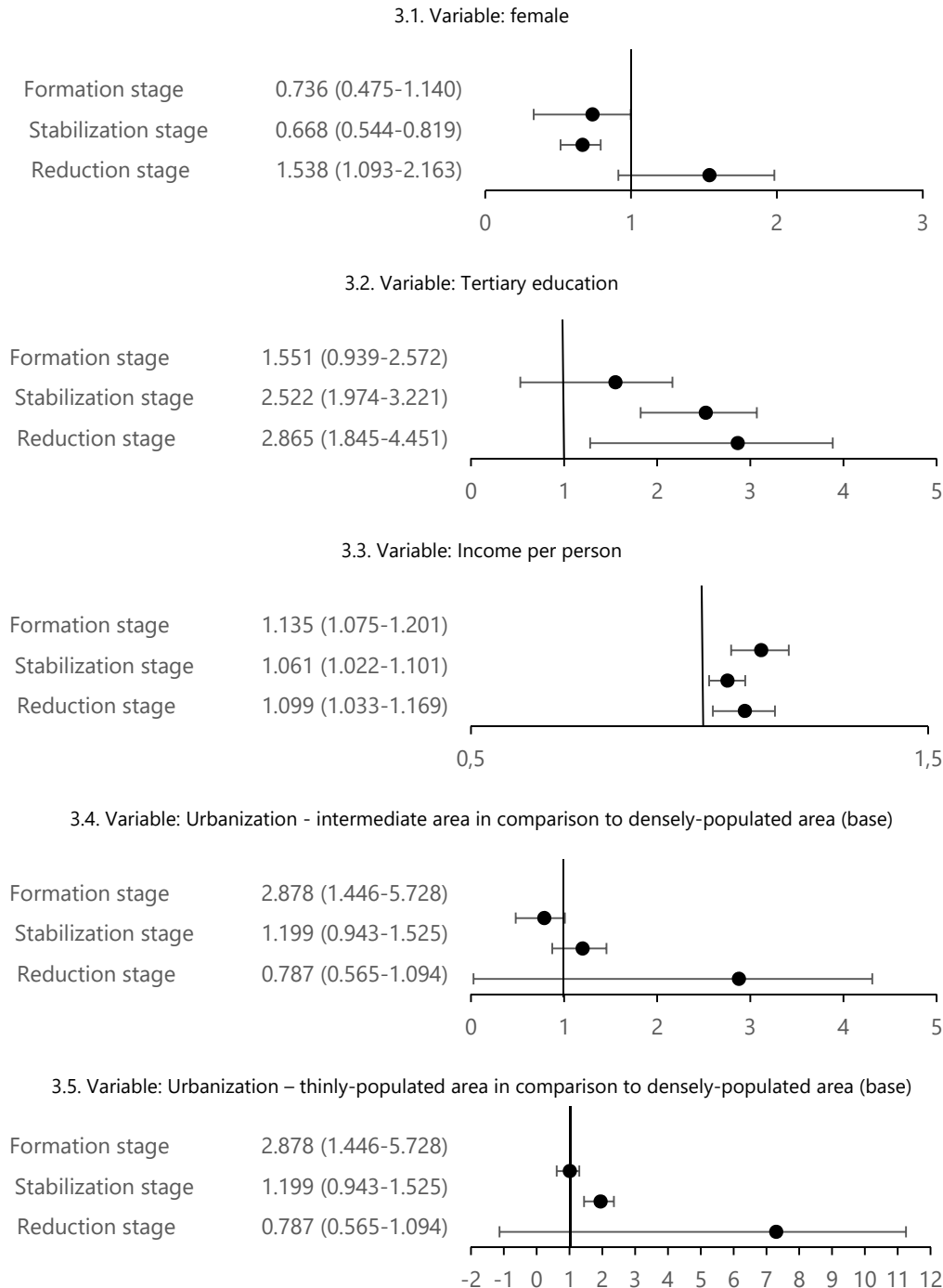


Fig 3. Forest plots for selected variables (odds ratio; lower/upper 95% CI). Source: EU-SILC Poland, 2018.

The housing choices of people in the household formation phase were influenced by three variables. These were: disposable income, age and place of residence. The probability of living in an owner-occupied flat increased with age, and these changes were stronger than in the phases of stabilization and reduction of the household. In this group, a strong relationship was observed between disposable income per person and the chance of entering into ownership. Each 1 thousand € of additional disposable income

per person per year increased the chance of living in an owner-occupied dwelling by 13.5%. Moreover, young people living in highly populated areas (mainly in large cities) were much more likely to rent apartments. The probability of living in an owner-occupied flat among people living in sparsely populated areas (mainly in villages) was over 7 times higher than in large cities. At the same time, living in moderately urbanized areas offered three times more chances of ownership than in highly populated areas.

When examining a household at the stage of stabilization and reduction, additional variables were taken into account, i.e. marital status and having children. In general, the models for these phases of the cycle identified many more factors, which on the one hand resulted from higher model estimation parameters, and on the other hand may indicate greater inequalities in access to owner-occupied housing. Demographic factors such as marital status, age and gender were of key importance here. The chance of living in an owner-occupied flat was three times lower for people who had never been married. This phase also included people who were divorced but lived with a partner (in informal relationships). However, these people were also 60% less likely to be owners of flats. Among households in the stabilization stage, the chances of homeownership 37% lower in those where the head of the household was a woman.

Another factor influencing the chance of being an owner at the stabilization stage was the education of the head of the household. In the case of having a higher education, this chance increased about 2.5 times. The impact of disposable income at this stage was much lower than at the stage of household formation. An increase in disposable income per capita by € 1,000 per year increased this opportunity by 6.1%. The chance of being an owner was almost twice as low if the head of the household was in poor health. Health status was not a source of inequality in access to housing at the formative stage. At the stabilization stage, much smaller regional differences were observed. The chance of being an owner for people living in small towns/villages was twice as high as in large cities.

The last model referred to households in the reduction phase. Divorced, separated or widowed people were twice less likely to be owners. Interestingly, however, in this group, women's households had a 54% greater chance of ownership, which is probably related to the higher average life expectancy among women. Another explanation could be that, after divorce, children are more likely to remain in the mother's care, which interacts with a greater likelihood of the father moving out of the home occupied by the family. The situation could also be explained by women's greater aspirations to enter into homeownership, as observed in Bryx et al. (2021) research. The chance of being an owner in this group increased with age, but the impact was much smaller than at the stage of household formation and stabilization. Having a higher education increased this chance about threefold. The impact of income was

much lower than for households at the formation stage, but higher than at the stabilization stage. No regional differences were observed in this group.

4. Discussion

The sources of inequality in access to one's own housing change over the life cycle of a household. In the formation phase, the urbanization level and the level of income are crucial. Similar relations were found in Coulter (2018) research who investigated tenure choice of 30-34 years old English and Welsh (similar: Bayrakdar et al., 2019). The impact of city size is probably related to two factors: the availability of rented houses and migration. Firstly, the rental market in Poland is concentrated in large cities. Young people living in smaller towns therefore have more difficulties with adjusting the offer to their requirements, so they decide to own a property more often, a decision which is also favoured by the lower level of real estate prices. Secondly, young people living in big cities often come to them in search of work, so they are internal migrants (as observed by Maroto & Severson, 2020). This means that they cannot continue living with their parents. They are forced to find place to live, so they choose to rent in cases when they do not prefer ownership or do not have financial possibilities to allow for it. If they do not migrate, they have less pressure to move out of their family home. In the stabilization phase, regional differences become blurred. The choice of housing becomes more dependent on preferences and financial capabilities. At the reduction stage, this completely loses its importance.

In the formation stage, the key source of inequality in homeownership is income. This is in line with the results obtained in Germany or the UK (Bayrakdar et al., 2019) or France (Bonnet et al., 2018). Its importance is the smallest in the stabilization phase. Gender, education or professional activity are irrelevant here. This, in turn, may lead to a wealth gap, given that the cost of housing loan repayment in the analyzed period was lower than the cost of renting a flat (Bartoszewicz, 2019). This is confirmed by research by Strączkowski (2022) conducted on the local housing market in Poznań, according to which the availability of housing in the urban area for young people is a challenge beyond their strength.

At the stage of stabilization of a household run by women, these were found to have a much lower chance of being owners, and at the stage of reduction - a much higher one. This relation is firstly connected with the fact that men generally tend to leave their

parents' homes later (Chiuri & Del Boca, 2010; Gillespie, 2020; Maroto & Severson, 2020). However, the difference concerns the gender of the person referred to as the "head of the household". When conducting research at the individual level (e.g. Matel & Olszewski 2022), a higher chance of ownership is observed among women. Representatives of this sex also have stronger ownership preferences (Bryx et al., 2021). Generally, there are some gender inequalities in the housing market in Poland (unlike: Barrios et al., 2013; Bayrakdar et al., 2019 for Germany). This area should be explored further.

What is more, we do not observe a fall in the probability of homeownership in the reduction stage of life (in Blaauiders', 2010) research for women over 70 and men over 60). An interesting fact is also the decrease in the chance of homeownership among divorcees who have entered into an informal relationship and now live with a partner. This indicates that, in Poland, entering into an informal relationship does not equalize the chances of living in an owner-occupied apartment in relation to married couples. This relation is different than observed in studies by Mundra and Uwaifo Oyelere (2019).

Among households in the stabilization phase, the source of inequality in access to own housing is health, which is irrelevant at the stage of formation and reduction. Overall, significantly fewer sources of inequality were observed at the reduction stage, which is related to the fact that housing conditions in Poland are quite evenly distributed across the elderly population (Marcinkiewicz & Chybalski, 2022).

5. Conclusion

Inequalities occurring in the housing market are an important area of research, especially in the context of the family life cycle. Many households make the decision to have children based on the level of stability they achieve, including their housing situation. This is particularly important when the rental market is non-institutionalized and does not provide an adequate level of stability to meet housing needs. Access to housing across age cohorts also determines the wealth gap between generations. Based on the research conducted, it can be concluded that people at the household formation stage in Poland - young singles without children - are particularly interested in the rental market, which, however, is limited by its uneven development on the national scale. The basic source of inequality in this group is the income level, with a significant limitation of the research conducted

here being the inability to analyze the impact of intergenerational transfers, which could potentially be crucial here. At subsequent stages, the family situation and level of education become more important. At the same time, there is a strong desire to take ownership in these groups, which means that there is a significant difference between individual groups in the structure of satisfying housing needs.

Certain limitations in the conducted research have been noticed. Firstly, it was not possible to freely select data based on the analyzed study. In EU-SILC database in particular there are no variables relating to intergenerational transfers, social origin and region of residence. Also, the urbanization variable does not allow for understanding the differences between the largest agglomerations and medium-sized cities, which could be potentially important, especially in the analysis of the intergenerational wealth gap.

The study also allows us to indicate interesting directions for further analyses. First of all, the intergenerational wealth gap should be analyzed and compared over the years. The business cycle may also have a significant impact here. Secondly, there is a need for detailed analysis of the gender homeownership gap in different age cohorts at the individual level. The relationship between the housing paths of women and men with different marital status seems particularly interesting. Another question is how the turbulence in the housing market observed since 2019 has affected the level of inequality in terms of access to homeownership in Poland. It is worth emphasizing that the surveyed year - 2018 - was the last relatively "quiet year" on the real estate market in Poland. Events in the following years - including a drastic decrease in the income and credit availability of housing in Poland, resulting from changes in interest rates and the dominant share of loans with variable interest rates (Czerniak et al., 2022), as well as the COVID-19 pandemic, foreign migrations, high inflation and international conflicts - make the continuation of research particularly interesting.

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